

10/561097

-1-

IAP20 Rec'd PCT/PTO 16 DEC 2005

SEQUENCE LISTING

<110> BAKER, Matthew
WATKINS, John

<120> THROMBOPOIETIN PROTEINS WITH IMPROVED
PROPERTIES

<130> MER-141

<140> Unknown
<141> - -

<150> PCT/US2004/006887
<151> 2004-06-25

<150> EP 03014331.7
<151> 2003-06-26

<160> 138

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 174
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<221> VARIANT
<222> 50, 51, 55, 58
<223> X=A or E;
X=S or W;
X=A, T, K, S or M;
X=A or T

<221> VARIANT
<222> 60, 61, 63, 67
<223> X=R or A;
X=A, T or Q;
X=A, T, or I;
X=A, T or V

<221> VARIANT
<222> 69, 71, 72, 161
<223> X=A, T, S or L;
X=A or L;
X=A, S or E;
X=N, A, T, R, E, D, G, H, P, K, Q or V

<221> VARIANT
<222> 162
<223> X=A or P

```

<400> 1
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Xaa Xaa Lys Thr Gln Xaa Glu Glu Xaa Lys Xaa Xaa Asp Xaa Leu
 50          55          60
Gly Ala Xaa Thr Xaa Leu Xaa Xaa Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Xaa Xaa Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

```

<210> 2
<211> 27
<212> PRT
<213> homo sapiens

```

```

<400> 2
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 1          5          10          15
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met
          20          25

```

```

<210> 3
<211> 15
<212> PRT
<213> homo sapiens

```

```

<400> 3
Pro Thr Thr Ala Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu
 1          5          10          15

```

```

<210> 4
<211> 332
<212> PRT
<213> homo sapiens

```

```

<400> 4
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu

```

	35					40					45					
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu	
	50					55					60					
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln	
65					70					75					80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln	
				85					90					95		
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu	
			100					105					110			
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe	
		115					120					125				
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu	
	130				135						140					
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala	
145					150					155					160	
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu	Pro	Asn	
				165					170					175		
Arg	Thr	Ser	Gly	Leu	Leu	Glu	Thr	Asn	Phe	Thr	Ala	Ser	Ala	Arg	Thr	
			180					185					190			
Thr	Gly	Ser	Gly	Leu	Leu	Lys	Trp	Gln	Gln	Gly	Phe	Arg	Ala	Lys	Ile	
	195						200					205				
Pro	Gly	Leu	Leu	Asn	Gln	Thr	Ser	Arg	Ser	Leu	Asp	Gln	Ile	Pro	Gly	
	210				215						220					
Tyr	Leu	Asn	Arg	Ile	His	Glu	Leu	Leu	Asn	Gly	Thr	Arg	Gly	Leu	Phe	
225					230					235				240		
Pro	Gly	Pro	Ser	Arg	Arg	Thr	Leu	Gly	Ala	Pro	Asp	Ile	Ser	Ser	Gly	
				245					250					255		
Thr	Ser	Asp	Thr	Gly	Ser	Leu	Pro	Pro	Asn	Leu	Gln	Pro	Gly	Tyr	Ser	
			260					265					270			
Pro	Ser	Pro	Thr	His	Pro	Pro	Thr	Gly	Gln	Tyr	Thr	Leu	Phe	Pro	Leu	
	275						280					285				
Pro	Pro	Thr	Leu	Pro	Thr	Pro	Val	Val	Gln	Leu	His	Pro	Leu	Leu	Pro	
	290				295						300					
Asp	Pro	Ser	Ala	Pro	Thr	Pro	Thr	Pro	Thr	Ser	Pro	Leu	Leu	Asn	Thr	
305					310					315					320	
Ser	Tyr	Thr	His	Ser	Gln	Asn	Leu	Ser	Gln	Glu	Gly					
				325					330							

```
<210> 5
<211> 7
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Linker peptide

```
<400> 5
Gly Ser Gly Ser Gly Ser Gly
  1             5
```

```
<210> 6
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>

<223> Modified human TPO

<400> 6

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1      5      10      15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20      25      30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35      40      45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Arg Gln Asp Ile Leu
50      55      60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65      70      75      80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85      90      95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
100     105     110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
115     120     125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130     135     140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145     150     155     160
Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
165     170

```

<210> 7

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 7

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1      5      10      15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20      25      30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35      40      45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
50      55      60
Gly Ala Thr Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65      70      75      80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85      90      95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
100     105     110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
115     120     125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130     135     140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145     150     155     160
Asn Ala Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
165     170

```

<210> 8
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 8
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
 50 55 60
 Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
 130 135 140
 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
 145 150 155 160
 Asn Ala Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
 165 170

<210> 9
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 9
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Ala Glu Glu Thr Lys Ala Gln Asp Ala Leu
 50 55 60
 Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe

		115					120					125					
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
	130					135					140						
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Ala	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
			165						170								

<210> 10
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400>	10																
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5					10					15			
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		
			20					25					30				
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu		
		35					40					45					
Gly	Glu	Trp	Lys	Thr	Gln	Thr	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ala	Leu		
	50					55					60						
Gly	Ala	Ala	Thr	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln			
65				70					75					80			
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln		
				85				90					95				
Val	Arg	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu			
			100				105					110					
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe		
		115					120					125					
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
	130					135					140						
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Ala	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
			165						170								

<210> 11
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400>	11																
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5					10					15			
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		
			20					25					30				
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu		
		35					40					45					
Gly	Glu	Trp	Lys	Thr	Gln	Thr	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Thr	Leu		

50		55		60	
Gly	Ala	Ala	Thr	Leu	Leu
65		70		75	
Leu	Gly	Pro	Thr	Cys	Leu
		85		90	
Val	Arg	Leu	Leu	Gly	Ala
		100		105	
Pro	Pro	Gln	Gly	Arg	Thr
		115		120	
Leu	Ser	Phe	Gln	His	Leu
		130		135	
Val	Gly	Gly	Ser	Thr	Leu
145				150	
Ala	Pro	Ser	Arg	Thr	Ser
				165	
					170

<210> 12
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 12	
Ser	Pro
1	5
Arg	Asp
	20
His	Pro
	35
Gly	Glu
	50
Gly	Ala
65	70
Leu	Gly
	85
Val	Arg
	100
Pro	Pro
	115
Leu	Ser
	130
Val	Gly
145	150
Ala	Pro
	165

Ala	Pro	Ala	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
		5						10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu
			20					25				30		Val
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35				40				45				
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Ala	Asp	Ala
	50					55				60				Leu
Gly	Ala	Ala	Thr	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65				70				75					80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly
				85				90				95		Gln
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln
			100				105					110		Leu
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile
		115				120					125			Phe
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met
	130				135					140				Leu
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr
145					150					155				Ala
Ala	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu	
					165				170					

<210> 13
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 13

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Ala Asp Thr Leu
      50           55           60
Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```

<210> 14

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 14

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
      50           55           60
Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```


<210> 15
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 15
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
 50 55 60
 Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
 130 135 140
 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
 145 150 155 160
 Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
 165 170

<210> 16
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 16
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
 50 55 60
 Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125

```

Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
   130               135           140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145               150           155           160
Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
               165           170

```

<210> 17
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 17
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
           20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
           35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
           50           55           60
Gly Ala Ala Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
           85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
           100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
           115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
           130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145           150           155           160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
           165           170

```

<210> 18
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 18
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
           20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
           35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
           50           55           60

```

Gly	Ala	Ala	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65				70						75				80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85				90						95	
Val	Arg	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu	
			100				105					110			
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130					135					140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Thr	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

<210> 19
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 19															
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35					40					45			
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu
	50					55					60				
Gly	Ala	Ala	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65				70					75					80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85				90						95	
Val	Arg	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu	
			100				105					110			
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130					135					140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Arg	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

<210> 20
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 20

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Met Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 21
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 21
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Thr Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 22

<211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 22
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Thr Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
 130 135 140
 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
 145 150 155 160
 Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
 165 170

<210> 23
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 23
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu

130		135		140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala				
145		150		155
Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu				160
	165		170	

<210> 24
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 24
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1 5 10 15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20 25 30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35 40 45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
50 55 60
Gly Ala Ala Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65 70 75 80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85 90 95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
100 105 110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
115 120 125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130 135 140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145 150 155 160
Glu Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
165 170

<210> 25
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 25
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1 5 10 15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20 25 30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35 40 45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
50 55 60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln

```

65              70              75              80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
                        85              90              95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
                        100              105              110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
                        115              120              125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
                        130              135              140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145              150              155              160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
                        165              170

```

<210> 26
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 26
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1      5      10
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20      25      30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35      40      45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
50      55      60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65      70      75      80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85      90      95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100      105      110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115      120      125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130      135      140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145      150      155      160
Arg Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165      170

```

<210> 27
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 27
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu

```

```

      1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20           25           30
His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
      35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
      50           55           60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
      65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
      145          150          155          160
Glu Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```

<210> 28
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 28
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
      1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Thr Leu
      50           55           60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
      65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
      145          150          155          160
Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```

<210> 29
 <211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 29

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
 50           55           60
Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145           150           155           160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 30

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 30

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
 50           55           60
Gly Ala Thr Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140

```

Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

<210> 31
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 31															
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu	
		35					40				45				
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Thr	Leu
	50					55					60				
Gly	Ala	Ala	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65					70				75					80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85					90					95	
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu
				100				105					110		
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130					135					140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

<210> 32
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 32															
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu	
		35					40				45				
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ala	Leu
	50					55					60				
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65					70					75				80	

Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85					90					95	
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu
			100					105					110		
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130				135						140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Ala	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

<210> 33
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35				40						45			
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ala	Leu
	50					55					60				
Gly	Ala	Val	Thr	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln	
65				70				75						80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85				90						95	
Val	Arg	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu	
		100					105					110			
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130				135						140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Glu	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

<210> 34
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	

Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20 25 30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35 40 45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
50 55 60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65 70 75 80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85 90 95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
100 105 110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
115 120 125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130 135 140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145 150 155 160
Arg Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
165 170

<210> 35

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 35

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1 5 10 15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20 25 30
His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
35 40 45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
50 55 60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65 70 75 80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85 90 95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
100 105 110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
115 120 125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130 135 140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145 150 155 160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
165 170

<210> 36

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 36

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35           40           45
Gly Ala Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50           55           60
Gly Ala Thr Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 37

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 37

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35           40           45
Gly Ala Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
          50           55           60
Gly Ala Val Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala

```

145					150				155				160
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu
					165				170				

<210> 38
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 38

Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35					40					45			
Gly	Ala	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Thr	Leu
	50					55					60				
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65					70					75					80
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85					90					95	
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu
			100					105					110		
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130					135					140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
					165					170					

<210> 39
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 39

Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35					40					45			
Gly	Ala	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu
	50					55					60				
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65					70					75					80
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln

				85					90					95			
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu		
			100					105					110				
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe		
		115					120					125					
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
	130					135					140						
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Glu	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
				165					170								

<210> 40
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5				10					15				
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		
			20				25					30					
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu		
		35				40					45						
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu		
	50				55					60							
Gly	Ala	Val	Thr	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln			
65				70				75						80			
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln		
			85				90					95					
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu		
		100					105					110					
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe		
		115				120						125					
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
	130				135					140							
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Ala	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
				165					170								

<210> 41
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5				10					15				
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		

```

                20                25                30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35                40                45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
      50                55                60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65                70                75                80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85                90                95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100                105                110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115                120                125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130                135                140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145                150                155                160
Asp Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165                170

```

<210> 42
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 42
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1                5                10                15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20                25                30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35                40                45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
      50                55                60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65                70                75                80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85                90                95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100                105                110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115                120                125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130                135                140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145                150                155                160
Glu Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165                170

```

<210> 43
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 43

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Gly Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 44

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 44

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
His Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu

```

165

170

<210> 45
<211> 174
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<400> 45
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1 5 10 15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20 25 30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35 40 45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
50 55 60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65 70 75 80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85 90 95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
100 105 110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
115 120 125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130 135 140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145 150 155 160
Asn Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
165 170

<210> 46
<211> 174
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<400> 46
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1 5 10 15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
20 25 30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
35 40 45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
50 55 60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65 70 75 80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
85 90 95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu

Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
		130					135					140			
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Pro	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

```
<210> 47
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Modified human TPO

<400>	47														
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35					40					45			
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu
	50					55					60				
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65					70					75					80
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85					90					95	
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu
			100					105					110		
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130					135					140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Lys	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

```
<210> 48
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Modified human TPO

<400> 48
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu

	35					40					45					
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu	
	50					55					60					
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln	
65					70					75					80	
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln	
				85					90					95		
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu	
			100					105					110			
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe	
		115					120					125				
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu	
	130					135					140					
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala	
145					150					155					160	
Gln	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu			
				165					170							

```
<210> 49
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Modified human TPO

<400>	49														
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu
1				5					10					15	
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val
			20					25					30		
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu
		35					40					45			
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu
	50					55					60				
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln
65					70					75					80
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
				85					90					95	
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu
			100					105					110		
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
		115					120					125			
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
	130					135					140				
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
145					150					155					160
Arg	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		
				165					170						

```
<210> 50
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>

<223> Modified human TPO

<400> 50

```
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170
```

<210> 51

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 51

```
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Ala Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170
```

<210> 52
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 52
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Thr Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
 130 135 140
 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
 145 150 155 160
 Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
 165 170

<210> 53
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 53
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ala Leu
 50 55 60
 Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe

		115					120				125						
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
		130					135				140						
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
				165					170								

<210> 54
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 54																	
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5					10					15			
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		
			20					25					30				
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu		
		35					40				45						
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Thr	Leu		
50					55						60						
Gly	Ala	Val	Thr	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln			
65				70				75						80			
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln		
				85				90						95			
Val	Arg	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu			
			100				105					110					
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe		
		115					120					125					
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
130						135					140						
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
				165					170								

<210> 55
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 55																	
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5					10					15			
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		
			20					25					30				
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu		
		35					40				45						
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Ala	Asp	Ile	Leu		

50				55				60							
Gly 65	Ala	Val	Thr	Leu	Leu 70	Leu	Glu	Gly	Val	Met 75	Ala	Ala	Arg	Gly	Gln 80
Leu	Gly	Pro	Thr	Cys 85	Leu	Ser	Ser	Leu	Leu 90	Gly	Gln	Leu	Ser	Gly 95	Gln
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu		

```
<210> 56
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Modified human TPO

<400>	56																
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu		
1				5					10					15			
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val		
			20					25					30				
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu		
		35					40					45					
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Thr	Asp	Ile	Leu		
	50					55					60						
Gly	Ala	Val	Thr	Leu	Leu	Leu	Glu	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln		
65					70					75					80		
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln		
				85					90					95			
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu		
			100					105					110				
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe		
		115					120					125					
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu		
	130					135					140						
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala		
145					150					155					160		
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu				
				165					170								

```
<210> 57
<211> 174
<212> PRT
<213> Artificial Sequence
```

<220>
<223> Modified human TPO

<400> 57

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Ala Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 58

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 58

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Lys Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 59
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 59
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Ser Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
 130 135 140
 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
 145 150 155 160
 Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
 165 170

<210> 60
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 60
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Thr Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125

```

Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
   130           135           140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145           150           155           160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
                165                170

```

<210> 61
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 61
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
                20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
        35           40           45
Gly Glu Trp Lys Thr Gln Met Glu Glu Ala Lys Ala Gln Asp Ile Leu
 50           55           60
Gly Ala Val Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
                85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
        100           105           110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
        115           120           125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
130           135           140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145           150           155           160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
                165                170

```

<210> 62
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 62
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
        20           25           30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
        35           40           45
Gly Glu Ser Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50           55           60

```

```

Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100         105         110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115         120         125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130         135         140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 63
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 63
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1      5      10
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20      25      30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35      40      45
Gly Ala Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50      55      60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100         105         110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115         120         125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130         135         140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 64
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 64

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Ala Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 65

<211> 174

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 65

```

Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1          5          10          15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
          20          25          30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
          35          40          45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
          50          55          60
Gly Ala Val Thr Ser Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
          85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
          100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
          115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
          130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
          165          170

```

<210> 66

<211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 66
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Val Thr Thr Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
 130 135 140
 Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
 145 150 155 160
 Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
 165 170

<210> 67
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 67
 Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
 1 5 10 15
 Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
 20 25 30
 His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
 35 40 45
 Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
 50 55 60
 Gly Ala Val Thr Leu Leu Ala Glu Gly Val Met Ala Ala Arg Gly Gln
 65 70 75 80
 Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
 85 90 95
 Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
 100 105 110
 Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
 115 120 125
 Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu

	130					135					140								
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala				
145						150				155					160				
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu						
					165					170									

<210> 68
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 68																			
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu				
1				5					10					15					
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val				
			20					25					30						
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu				
			35				40					45							
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu				
			50			55					60								
Gly	Ala	Val	Thr	Leu	Leu	Leu	Ala	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln				
65					70				75					80					
Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln				
				85				90						95					
Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln	Ser	Leu	Leu	Gly	Thr	Gln	Leu				
				100				105						110					
Pro	Pro	Gln	Gly	Arg	Thr	Thr	Ala	His	Lys	Asp	Pro	Asn	Ala	Ile	Phe				
			115				120						125						
Leu	Ser	Phe	Gln	His	Leu	Leu	Arg	Gly	Lys	Val	Arg	Phe	Leu	Met	Leu				
			130			135						140							
Val	Gly	Gly	Ser	Thr	Leu	Cys	Val	Arg	Arg	Ala	Pro	Pro	Thr	Thr	Ala				
145					150					155					160				
Val	Pro	Ser	Arg	Thr	Ser	Leu	Val	Leu	Thr	Leu	Asn	Glu	Leu						
					165					170									

<210> 69
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

<400> 69																			
Ser	Pro	Ala	Pro	Pro	Ala	Cys	Asp	Leu	Arg	Val	Leu	Ser	Lys	Leu	Leu				
1				5					10					15					
Arg	Asp	Ser	His	Val	Leu	His	Ser	Arg	Leu	Ser	Gln	Cys	Pro	Glu	Val				
			20					25					30						
His	Pro	Leu	Pro	Thr	Pro	Val	Leu	Leu	Pro	Ala	Val	Asp	Phe	Ser	Leu				
			35				40					45							
Gly	Glu	Trp	Lys	Thr	Gln	Met	Glu	Glu	Thr	Lys	Ala	Gln	Asp	Ile	Leu				
			50			55					60								
Gly	Ala	Val	Thr	Leu	Leu	Leu	Ser	Gly	Val	Met	Ala	Ala	Arg	Gly	Gln				

```

65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```

<210> 70
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 70
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
1      5      10      15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20      25      30
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      35      40      45
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Arg Gln Asp Ile Leu
      50      55      60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
65          70          75          80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85          90          95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```

<210> 71
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

<400> 71
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu

```



```

      1           5           10           15
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      20           25           30
His Pro Leu Pro Thr Pro Val Leu Pro Ala Val Asp Phe Ser Leu
      35           40           45
Gly Glu Trp Lys Thr Gln Lys Glu Glu Thr Lys Arg Gln Asp Ile Leu
      50           55           60
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
      65           70           75           80
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      85           90           95
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      100          105          110
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      115          120          125
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      130          135          140
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
      145          150          155          160
Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
      165          170

```

<210> 72
 <211> 174
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Modified human TPO

```

      1           5           10           15
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu
      20           25           30
Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val
      35           40           45
His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
      50           55           60
Gly Glu Trp Lys Thr Gln Lys Glu Glu Thr Lys Arg Gln Asp Ile Leu
      65           70           75           80
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln
      85           90           95
Leu Gly Pro Thr Cys Leu Ser Ser Leu Leu Gly Gln Leu Ser Gly Gln
      100          105          110
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu
      115          120          125
Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe
      130          135          140
Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
      145          150          155          160
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala
      165          170
Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu

```

<210> 73
 <211> 232

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human Ig G4 Fc domain

<400> 73

```
Glu Pro Lys Ser Ser Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala
 1              5              10              15
Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro
      20              25              30
Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val
      35              40              45
Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr Val
      50              55              60
Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln
      65              70              75              80
Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln
      85              90              95
Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly
      100             105             110
Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro
      115             120             125
Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu Met Thr
      130             135             140
Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
      145             150             155             160
Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr
      165             170             175
Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr
      180             185             190
Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile Phe
      195             200             205
Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys
      210             215             220
Ser Leu Ser Leu Ser Pro Gly Ala
      225             230
```

<210> 74

<211> 15

<212> PRT

<213> homo sapiens

<400> 74

```
Ser Pro Ala Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu
 1              5              10              15
```

<210> 75

<211> 15

<212> PRT

<213> homo sapiens

<400> 75

```
Pro Pro Ala Cys Asp Leu Arg Val Leu Ser Lys Leu Leu Arg Asp
 1              5              10              15
```

<210> 76
<211> 15
<212> PRT
<213> homo sapiens

<400> 76
Cys Asp Leu Arg Val Leu Ser Lys Leu Leu Arg Asp Ser His Val
1 5 10 15

<210> 77
<211> 15
<212> PRT
<213> homo sapiens

<400> 77
Arg Val Leu Ser Lys Leu Leu Arg Asp Ser His Val Leu His Ser
1 5 10 15

<210> 78
<211> 15
<212> PRT
<213> homo sapiens

<400> 78
Ser Lys Leu Leu Arg Asp Ser His Val Leu His Ser Arg Leu Ser
1 5 10 15

<210> 79
<211> 15
<212> PRT
<213> homo sapiens

<400> 79
Leu Arg Asp Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro
1 5 10 15

<210> 80
<211> 15
<212> PRT
<213> homo sapiens

<400> 80
Ser His Val Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val His
1 5 10 15

<210> 81
<211> 15
<212> PRT
<213> homo sapiens

<400> 81
Leu His Ser Arg Leu Ser Gln Cys Pro Glu Val His Pro Leu Pro
1 5 10 15

<210> 82
<211> 15
<212> PRT
<213> homo sapiens

<400> 82
Arg Leu Ser Gln Cys Pro Glu Val His Pro Leu Pro Thr Pro Val
1 5 10 15

<210> 83
<211> 15
<212> PRT
<213> homo sapiens

<400> 83
Gln Cys Pro Glu Val His Pro Leu Pro Thr Pro Val Leu Leu Pro
1 5 10 15

<210> 84
<211> 15
<212> PRT
<213> homo sapiens

<400> 84
Glu Val His Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp
1 5 10 15

<210> 85
<211> 15
<212> PRT
<213> homo sapiens

<400> 85
Pro Leu Pro Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu
1 5 10 15

<210> 86
<211> 15
<212> PRT
<213> homo sapiens

<400> 86
Thr Pro Val Leu Leu Pro Ala Val Asp Phe Ser Leu Gly Glu Trp
1 5 10 15

<210> 87
<211> 15
<212> PRT
<213> homo sapiens

<400> 87
Leu Leu Pro Ala Val Asp Phe Ser Leu Gly Glu Trp Lys Thr Gln

1	5	10	15
---	---	----	----

<210> 88
<211> 15
<212> PRT
<213> homo sapiens

<400> 88
Ala Val Asp Phe Ser Leu Gly Glu Trp Lys Thr Gln Met Glu Glu
1 5 10 15

<210> 89
<211> 15
<212> PRT
<213> homo sapiens

<400> 89
Phe Ser Leu Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala
1 5 10 15

<210> 90
<211> 15
<212> PRT
<213> homo sapiens

<400> 90
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile
1 5 10 15

<210> 91
<211> 15
<212> PRT
<213> homo sapiens

<400> 91
Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu Gly Ala
1 5 10 15

<210> 92
<211> 15
<212> PRT
<213> homo sapiens

<400> 92
Met Glu Glu Thr Lys Ala Gln Asp Ile Leu Gly Ala Val Thr Leu
1 5 10 15

<210> 93
<211> 15
<212> PRT
<213> homo sapiens

<400> 93
Thr Lys Ala Gln Asp Ile Leu Gly Ala Val Thr Leu Leu Leu Glu
1 5 10 15

<210> 94
<211> 15
<212> PRT
<213> homo sapiens

<400> 94
Gln Asp Ile Leu Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met
1 5 10 15

<210> 95
<211> 15
<212> PRT
<213> homo sapiens

<400> 95
Leu Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg
1 5 10 15

<210> 96
<211> 15
<212> PRT
<213> homo sapiens.

<400> 96
Val Thr Leu Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln Leu
1 5 10 15

<210> 97
<211> 15
<212> PRT
<213> homo sapiens

<400> 97
Leu Leu Glu Gly Val Met Ala Ala Arg Gly Gln Leu Gly Pro Thr
1 5 10 15

<210> 98
<211> 15
<212> PRT
<213> homo sapiens

<400> 98
Gly Val Met Ala Ala Arg Gly Gln Leu Gly Pro Thr Cys Leu Ser
1 5 10 15

<210> 99
<211> 15
<212> PRT

<213> homo sapiens

<400> 99

Ala	Ala	Arg	Gly	Gln	Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu
1				5					10					15

<210> 100

<211> 15

<212> PRT

<213> homo sapiens

<400> 100

Gly	Gln	Leu	Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu
1				5					10					15

<210> 101

<211> 15

<212> PRT

<213> homo sapiens

<400> 101

Gly	Pro	Thr	Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln
1				5					10					15

<210> 102

<211> 15

<212> PRT

<213> homo sapiens

<400> 102

Cys	Leu	Ser	Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln	Val	Arg	Leu
1				5					10					15

<210> 103

<211> 15

<212> PRT

<213> homo sapiens

<400> 103

Ser	Leu	Leu	Gly	Gln	Leu	Ser	Gly	Gln	Val	Arg	Leu	Leu	Leu	Gly
1				5					10					15

<210> 104

<211> 15

<212> PRT

<213> homo sapiens

<400> 104

Gly	Gln	Leu	Ser	Gly	Gln	Val	Arg	Leu	Leu	Leu	Gly	Ala	Leu	Gln
1				5					10					15

<210> 105

<211> 15
<212> PRT
<213> homo sapiens

<400> 105
Ser Gly Gln Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu
1 5 10 15

<210> 106
<211> 15
<212> PRT
<213> homo sapiens

<400> 106
Val Arg Leu Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln
1 5 10 15

<210> 107
<211> 15
<212> PRT
<213> homo sapiens

<400> 107
Leu Leu Gly Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu Pro Pro
1 5 10 15

<210> 108
<211> 15
<212> PRT
<213> homo sapiens

<400> 108
Ala Leu Gln Ser Leu Leu Gly Thr Gln Leu Pro Pro Gln Gly Arg
1 5 10 15

<210> 109
<211> 15
<212> PRT
<213> homo sapiens

<400> 109
Ser Leu Leu Gly Thr Gln Leu Pro Pro Gln Gly Arg Thr Thr Ala
1 5 10 15

<210> 110
<211> 15
<212> PRT
<213> homo sapiens

<400> 110
Gly Thr Gln Leu Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp
1 5 10 15

<210> 111
<211> 15
<212> PRT
<213> homo sapiens

<400> 111
Leu Pro Pro Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala
1 5 10 15

<210> 112
<211> 15
<212> PRT
<213> homo sapiens

<400> 112
Gln Gly Arg Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe Leu
1 5 10 15

<210> 113
<211> 15
<212> PRT
<213> homo sapiens

<400> 113
Thr Thr Ala His Lys Asp Pro Asn Ala Ile Phe Leu Ser Phe Gln
1 5 10 15

<210> 114
<211> 15
<212> PRT
<213> homo sapiens

<400> 114
His Lys Asp Pro Asn Ala Ile Phe Leu Ser Phe Gln His Leu Leu
1 5 10 15

<210> 115
<211> 15
<212> PRT
<213> homo sapiens

<400> 115
Pro Asn Ala Ile Phe Leu Ser Phe Gln His Leu Leu Arg Gly Lys
1 5 10 15

<210> 116
<211> 15
<212> PRT
<213> homo sapiens

<400> 116
Ile Phe Leu Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe
1 5 10 15

<210> 117
<211> 15
<212> PRT
<213> homo sapiens

<400> 117
Ser Phe Gln His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu
1 5 10 15

<210> 118
<211> 15
<212> PRT
<213> homo sapiens

<400> 118
His Leu Leu Arg Gly Lys Val Arg Phe Leu Met Leu Val Gly Gly
1 5 10 15

<210> 119
<211> 15
<212> PRT
<213> homo sapiens

<400> 119
Arg Gly Lys Val Arg Phe Leu Met Leu Val Gly Gly Ser Thr Leu
1 5 10 15

<210> 120
<211> 15
<212> PRT
<213> homo sapiens

<400> 120
Val Arg Phe Leu Met Leu Val Gly Gly Ser Thr Leu Cys Val Arg
1 5 10 15

<210> 121
<211> 15
<212> PRT
<213> homo sapiens

<400> 121
Leu Met Leu Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro
1 5 10 15

<210> 122
<211> 15
<212> PRT
<213> homo sapiens

<400> 122
Val Gly Gly Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr

1 5 10 15

<210> 123
<211> 15
<212> PRT
<213> homo sapiens

<400> 123
Ser Thr Leu Cys Val Arg Arg Ala Pro Pro Thr Thr Ala Val Pro
1 5 10 15

<210> 124
<211> 15
<212> PRT
<213> homo sapiens

<400> 124
Cys Val Arg Arg Ala Pro Pro Thr Thr Ala Val Pro Ser Arg Thr
1 5 10 15

<210> 125
<211> 15
<212> PRT
<213> homo sapiens

<400> 125
Arg Ala Pro Pro Thr Thr Ala Val Pro Ser Arg Thr Ser Leu Val
1 5 10 15

<210> 126
<211> 15
<212> PRT
<213> homo sapiens

<400> 126
Pro Thr Thr Ala Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu
1 5 10 15

<210> 127
<211> 15
<212> PRT
<213> homo sapiens

<400> 127
Ala Val Pro Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu
1 5 10 15

<210> 128
<211> 15
<212> PRT
<213> homo sapiens

<400> 128

Ser Arg Thr Ser Leu Val Leu Thr Leu Asn Glu Leu Pro Asn Arg
1 5 10 15

<210> 129

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 129

Gly Glu Trp Lys Thr Gln Lys Glu Glu Thr Lys Ala Gln Asp Ile Leu
1 5 10 15
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met
20 25

<210> 130

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 130

Gly Glu Trp Lys Thr Gln Met Glu Glu Arg Lys Ala Gln Asp Ile Leu
1 5 10 15
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met
20 25

<210> 131

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 131

Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Arg Gln Asp Ile Leu
1 5 10 15
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met
20 25

<210> 132

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 132
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Arg Ile Leu
1 5 10 15
Gly Ala Val Thr Leu Leu Leu Glu Gly Val Met
20 25

<210> 133
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<400> 133
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
1 5 10 15
Gly Ala Val Thr Ala Leu Leu Glu Gly Val Met
20 25

<210> 134
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<400> 134
Gly Glu Trp Lys Thr Gln Met Glu Glu Thr Lys Ala Gln Asp Ile Leu
1 5 10 15
Gly Ala Val Thr Leu Ala Leu Glu Gly Val Met
20 25

<210> 135
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<400> 135
Pro Thr Thr Ala Ala Pro Ser Arg Thr Ser Leu Val Leu Thr Leu
1 5 10 15

<210> 136
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Modified human TPO

<400> 136

Pro Thr Thr Ala Asn Pro Ser Arg Thr Ser Leu Val Leu Thr Leu
1 5 10 15

<210> 137

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 137

Pro Thr Thr Ala Arg Pro Ser Arg Thr Ser Leu Val Leu Thr Leu
1 5 10 15

<210> 138

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Modified human TPO

<400> 138

Pro Thr Thr Ala Thr Pro Ser Arg Thr Ser Leu Val Leu Thr Leu
1 5 10 15